

Bouteloua hirsuta var. palmeri Vasey in Beal, Grasses N. Amer. 2:417. 1896.

Erucaria glandulosa Cerv., Naturaleza 1:347. 1870.

Bouteloua hirticulmis Scribn. U.S. Dept. Agr., Div. Agrost. Circ. 30:4. 1901.

Bouteloua bolanderi Vasey ex Beal. Grasses N. Amer. 2:417. 1896, nomen.

Bouteloua glandulosa (Cerv.) Swallen, N. Amer. Fl. 17: 621. 1939.

Bouteloua hirsuta, Lag. var. glandulosa (Cerv.) Gould, Jour. Arnold Arbor. 60:320. 1979.

Swallen in making the new combination states "Perennial; very similar in habit and appearance to B. hirsuta, differing mostly in its conspicuously papillose-hirsute culms; awns of the rudiment somewhat longer than in B. hirsuta, the spikes therefore more bristly."

According to Gould "The occurrence of forms of B. hirsuta with sparsely hirsute culms in the Santa Rita Mountains supports Griffiths' observations that B. glandulosa is probably only a form of B. hirsuta and not distinct."

B. hirsuta var. palmeri Vasey is described by Vasey as "much larger, often a meter high; spikes 3-6 in number, broader, often 4 mm long." (Note: this seems to be a mistake for 4 cm long).

If Bouteloua glandulosa is to be treated as a variety of Bouteloua hirsuta then B. hirsuta var. palmeri Vasey is the earliest name.

Brachiaria arizonica (Scribn. & Merr.) Blake var. major (Vasey) comb. nov.

Panicum fuscum Swartz var. majus Vasey, U.S. Dept. Agr. Div. Agrost. Circ. 32:3. 1901.

Panicum fasciculatum var. major (Vasey) Beal, Grasses North America 2:117. 1896

Brachiaria arizonica (Scribn. & Merr.) Blake var. laeviglume
(Scribn. & Merr.) comb. nov.

Panicum arizonicum var. laeviglume Scribn. & Merr.
U.S. Dept. Agr. Div. Agrost. Circ. 32:3. 1901.
Described from "Mescal, Arizona".

Brachiaria arizonicum (Scribn. & Merr.) Blake var. tenuis
(Scribn. & Merr.) comb. nov.

Panicum arizonicum var. tenuis Scribn. & Merr. U.S.
Dept. Agr. Div. Agrost. Circ. 32:3. 1901.

Brachiaria fasciculata (Swartz) Parodi var. reticulata
(Torr.) comb. nov.

Panicum fasciculatum var. reticulatum (Torr.) Beal,
Grasses N. Amer. 2:117. 1896.

Panicum reticulatum Torr. in Marcy, Expl. Red River.
299. 1852. Described from Red River, Texas.

Panicum fuscum Sw. reticulatum (Torr.) Scribn. and
Merr. U.S. Dept. Agr. Div. Agrost. Circ. 32:4.
1901.

Brachiaria fasciculata (Swartz) Parodi var. stricta
(Doell in Mart.) comb. nov.

Panicum fasciculatum Sw. var. strictum Doell in
Mart. Fl. Bras. 2 (2):205. 1877.

Brachiaria fasciculatum (Swartz) Parodi var. carthaginense
(Sw.) comb. nov.

Panicum fasciculatum Sw. var. carthaginense (Sw.)
Doell. in Mart. Fl. Bras. 2 (2):205. 1877.

Panicum carthaginense Sw. Prod. Veg. Ind. Occ.
22:1788.

Digitaria nutans (L.) comb. nov.

Andropogon nutans L. Sp. Pl. 1045. 1753, pro parte,
excl. syn. Gronov. virg. 133.

Andropogon insulare L., Syst. Nat. ed. 10. 2:1304.
1759 (May or June), quoad. syn. Sloan.

Andropogon insulare L., Pugillus Pl. Jam. 1759 (Nov.),
quoad. specimen Brownianum.

Trichanchne insularis (L.) Nees, Agrost. Bras. 86.
1829.

Koeleria californica (Domin) comb. nov.

Koeleria pseudocristata Domin var. californica Domin,
Magyar Bot Lapok 3:264. 1904.

Type C.G. Pringle. Collected in 1882 "hills, San Diego", type collection seen in U.S. Nat. An elegant large-flowered, long paniced species from California and northern Mexico.

Koeleria cristata (L.) Pers. var. elegantula (Domin) comb.
nov.

This small-flowered type is a good geographical variety. Type collection, C.F. Baker 576 from Gunnison Colorado, seen in the U.S. Nat. Herb. The United States Forest Service herbarium now at Laramie, Wyoming has an excellent series of collections of this variety.

Leptochloa digitatiformis sp. nov.

Perenne, affine L. chloridiformi; culmi erecti. caespitosi, 60-150 cm alti, laminae hasta 3 mm latae; vaginae glabrae; ligula membranaceo con cilia ca. 1 mm longa. Racemis 5-10, conjugatis, 10-16 cm longis; spiculae non imbricatae; glumae 1-nervata, acuminata, 1.5-3 mm longa, inaequalae; spiculis 1-floris, brevipedicellatis; lemmata ca 3 mm longa, pilis marginalis, sine arista, incise.

Type: Mexico, Sonora, Ejido km 47, mpio Fronteras, matorral subinermis, August 19, 1981, Coll. Raul Bernal and Rene Cuadra. Also collected in Sonora, between Cananea and Agua Prieta, August 15, 1980, by Sergio Luque.

Stout, cespitose perennial with stiffly erect culms mostly 60 to 150 cm tall; sheaths smooth, compressed, purplish; ligule ca 1 mm long, a dense, irregular fringe of white hairs on a minute membranous base; blades firm, scabrous, elongate, up to 3 mm broad, usually somewhat narrower than the rather prominent sheaths.

Inflorescence partially included in the uppermost sheath, with 5 to 10 flexuous branches clustered or subdigitate at the culm apex; inflorescence branches mostly 10 to 16 cm long and about 3 mm wide, the 2-flowered spikelets short-pedicelate and not overlapping; glumes 1-nerved, acute, 1.5 to 3 mm long, the first glume shorter than the second; lemmas with a very few scanty cilia on the margins, notched awnless and ca. 3 mm long.

Apparently related to the Argentine Leptochloa chloridiformis (Hack.) Parodi but differing in the remote spikelets (not imbricate) and the notched apex of the lemma (not three toothed). This is the only Mexican species with digitate racemes. It is not clear from the description in Gould's Grasses of Texas (1975) whether his report of Leptochloa chloridiformis is actually that species or is L. digitatiformis.

Panicum fernandopouanum nom. nov.

Panicum macrophyllum Guinea ex Clayton, Kew Bull.
21 (1) 111. 1967.

Not P. macrophyllum Raddi (1823) which is Panicum latissimum Mikan; cf. Chase, A. 1923. The identification of Raddi's Grasses. Jour. Wash. Acad. Sci. 13:178.

Paspalum humboldtianum Flugge var. elegantissima
var. nov.

Perenne, affine P. humboldtianum var. humboldtianum, culmi hasta 1 m alti, laminae 1.5-1.8 cm latae, angustissima, con medium maximum partem, planae; area de torques cum pelos densa, longa y declinatio recta. Panicula de tres (o cinco) racemi 7-11 cm longi; spiculae 4 mm longae, biserialibus, sessilibus, oblongis, sericeo-villosis, saepe purpuris.

Perennial, rhizomatous, forming very loose clumps, the culms 6 to 8 dm tall, the joints yellowish, smooth, torn sheath bases at the nodes, the lower sheaths bladeless, the upper sheaths with blades more or less divaricately spreading, 1 to 1.5 dm long, 1 to 1.5 cm broad, tapering on both ends, leaf margins commonly ciliate, the color area usually densely clothed with long, divaricately spreading hairs. Inflorescence of at least two and occasionally 5 racemes but mostly 3 or 4, 5 to 8 cm long, 1 to 2 cm apart; spikelets rarely only 2 mm. long, mostly 3 to 3.5 mm long, the cilia an off-color white, the sterile lemma usually with a purplish edge, the white cilia contrasting sharply with the dark purple stigmas.

Type Collection:

Beetle M - 5962 from Mexico, Jalisco, 9 km from Los Volcanos San Jose de Las Andrade, Sept. 29, 1980.

Distribution:

Common from 500 to 2000 m in Mexico, pine or oak woods. Mexican collections include Oaxaca; Conzatti 3641; Guerrero: Hinton 11400; Morelos: Hitchcock 6837; Michoacan: Leavenworth 1649; Colima: Hitchcock 7055 Jalisco:McVaugh 19098.

Paspalum humboldtianum var. stuckertii (Hack.) Hack. Allg. Bot. Zeitsch. 12:97. 1906. is a plant with very narrow and elongate leaves but somewhat similar purplish-edged spikelets and white hairs, that is found in Argentina. Paspalum humboldtianum var. humboldtianum which is common in Mexico and Central America has spikelets with brownish hairs arranged on shorter racemes.

Paspalum guzmanii nom. nov.

Paspalum indutum Swallen, Phytologia 14:373. 1967.
not P. indutum Lucas, Jour. Washington Acad.
Sci. 32:162. f. 6. 1942.

Raphael Guzman-M. has maintained a steady interest in the genus Paspalum and has prepared the text on Paspalum for a forthcoming "Grasses of Mexico".

Poa coahuilensis nom. nov.

Poa filiculmis Swallen, Contr. U.S. Nat. Herb. 29:400.
1950, from Coahuila, Mexico, Stanford, Retherford
and Northcraft no. 477.

Not Poa filiculmis Roshev Not. Syst. Herb. Inst. Bot.
Komarov Acad. Sci. U.R.S.S. 11:28. 1949.

Sorghastrum albescens (Fourn.) comb. nov.

Andropogon albescens Fourn. Mex. Pl. 2:56. 1886.
Based on Gouin 53 from Veracruz, Mexico.

Sorghastrum liebmannianum Hitchcock, Contrib. U.S.
Nat. Herb. 17:211. 1913. Based on Hitchcock
6352 from Veracruz, Mexico.